

## CLAIMS

1. A radio base station apparatus, comprising a mobile communication radio base station having a diversity reception function, said radio base station comprising a plurality of radio units, each of said plurality of radio units comprising a receiving unit in one sector, which is connected to an antenna in another sector.

2. A radio base station apparatus according to Claim 1, wherein said mobile communication radio base station further comprises:

a control unit for detecting fault information of said plurality of radio units; and

a baseband signal processing unit for specifying the radio unit which is damaged, based on a signal from said control unit, and for stopping a received signal from the receiving unit in said damaged radio unit.

3. A radio base station apparatus according to Claim 1 or 2, wherein said radio unit comprises a plurality of transmitting units.

4. A radio base station apparatus according to any one of Claims 1 to 3, wherein said receiving unit in the one sector is connected to said antenna in the other sector via antenna sharing equipment.

5. A radio base station apparatus according to Claim 4, wherein said receiving unit and said antenna, which are connected via said antenna sharing equipment, are further

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connected via a divider.

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6. A radio base station apparatus according to any one of Claims 1 to 5, wherein said transmitting unit is connected to the antenna via a mixer and antenna sharing equipment.

7. A radio base station apparatus according to Claim 5 or 6, further comprising a plurality of the baseband signal processing units.

8. A method for preventing a radio function from being interrupted when a communication fault is caused in a mobile communication radio base station having a diversity reception function, said method comprising the steps of:

detecting a fault signal from a functional unit for covering one of a plurality of sectors;

transmitting a fault notifying signal to a baseband signal processing unit based on the detected fault signal; and

invalidating an output signal from a receiving unit in said functional unit in which the fault is caused based on said fault notifying signal.

9. A method for preventing a radio function from being interrupted when a communication fault is caused in a mobile communication radio base station having a diversity reception function, said method comprising the steps of:

detecting a fault signal from a multicarrier-type functional unit for covering one of a plurality of sectors;

transmitting a fault notifying signal to a baseband  
signal processing unit based on said detected fault signal;  
and

invalidating an output signal from a receiving unit in  
said functional unit in which the fault is caused, based on  
said fault notifying signal.

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